

Attorney Docket No. SHAN01US

Amendments to the Claims:

Following is a complete listing of the claims pending in the application, as amended:

1. (Currently amended) A method comprising:

forming a lower cladding layer, said lower cladding layer having at least one waveguide support, said at least one waveguide support being raised relative to said lower cladding layer such that said at least one waveguide support has a waveguide support width dimension and a waveguide support height dimension;

forming a core material onto said at least one waveguide support; and

forming an upper cladding layer over said core material.

2. (Original) The method of Claim 1 wherein said upper cladding layer and said

lower cladding layer surround said core material.

3. (Cancelled) The method of Claim 1 wherein said core material is formed to be a

substantially triangular.

4. (Currently amended) The method of Claim 1 wherein said forming of said core

material is by deposited using a high density plasma chemical vapor deposition (HDPCVD) process.

5. (Original) The method of Claim 1 wherein said core material is an oxide.

Attorney Docket No. SHAN01US

6. (Currently amended) The method of Claim 1 wherein the step of forming said lower cladding layer comprises is formed by:

blanket depositing lower cladding material onto a substrate; and

patterning and etching said lower cladding material to form said waveguide support.

7. (Cancelled) The method of Claim 1 wherein said core material is formed to be a substantially semi-circular shape.

8. (Original) The method of Claim 1 wherein said core material is doped with a rare earth element.

9. (Currently amended) The method of Claim 1 wherein the steps of forming said core material and forming said upper cladding layer are is deposited *in situ* with each other.

10. (Currently amended) The method of Claim 1 wherein said waveguide support has a width dimension is much less than said waveguide a-height dimension.

11. (Currently amended) A method comprising:

forming a lower cladding layer, said lower cladding layer having at least one waveguide support, said at least one waveguide support being raised relative to said lower cladding layer such that said at least one waveguide support has a waveguide support width dimension and a waveguide support height dimension, said waveguide support width dimension less than said waveguide support height dimension;

Attorney Docket No. SHAN01US

forming a core material onto said at least one waveguide support using a high density plasma chemical vapor deposition (HDPCVD) process, wherein said core material is an oxide; and

forming an upper cladding layer over said core material, wherein said upper cladding layer and said lower cladding layer surround said core material.

12. (Currently amended) The method of Claim 11 wherein the step of forming said lower cladding layer comprises is formed by:

blanket depositing lower cladding material onto a substrate; and

patterning and etching said lower cladding material to form said waveguide support.

13. (Currently amended) The method of Claim 11 wherein the step of forming said core material is performed such that said core material is doped with a rare earth element.

14. (Cancelled) The method of Claim 11 wherein said core material is formed to be a substantially triangular shape.

15. (Cancelled) The method of Claim 11 wherein said core material is formed to be a substantially semi-circular shape.

16. (Currently amended) The method of Claim 11 wherein the steps of forming said core material and forming said upper cladding layer are is deposited in situ with each other.

Claims 17-19 (Previously cancelled).

Attorney Docket No. SHAN01US

20. (New) The method of Claim 11 wherein said core material is non-rectangular.